

This challenge book belongs to

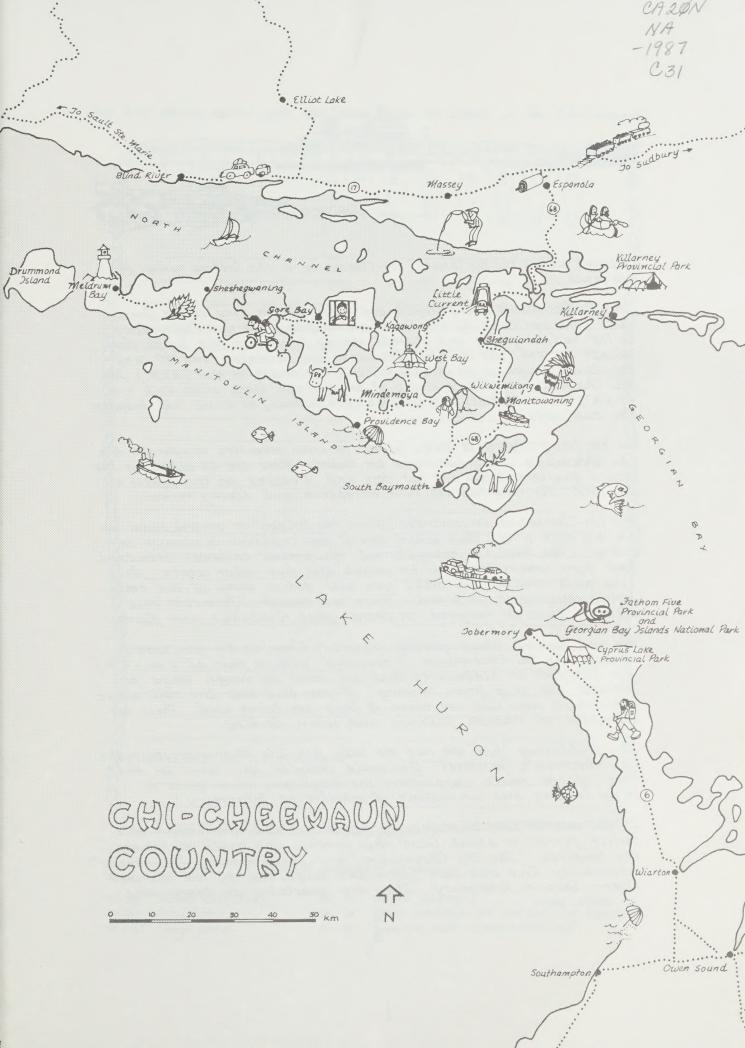
who has sailed on the "M.S.Chi-Cheemaun" between Jobermory and South Baymouth, in the waters of Lake Huron, Ontario.

Date _____

Written and illustrated by hyn Boggs

Cover design: Dovid Conning

"Chi-Cheemaun Challenge" is free for the taking. You may reproduce it, but no charge should be made for its use.







Welcome aboard the Big Canoe! Chi-Cheemaun is the Ojibwe word for big canoe.

The Chi-Cheemaun is the largest and most modern ferry on the Great Lakes. She was built by the Canadian Shipbuilding and Engineering Co. Ltd. in Collingwood and started serving Jobermory and South Baymouth in 1914. She can accommodate 600 passengers and 140 cars. Her overall length is 110 m. (365 ft.) and her width is 19m. (62 ft.). The Chi-Cheemaun will be cruising at an average speed of 30 K.p.h. (18 m.p.h.) and consuming 2010 litres (450 gatlons) of diesel fuel between the two ports.

In the busy season it takes about 75 crew members to operate the Chi-Cheemaun. They live right on board. There are 29 cabins in the crew's quarters below the car deck and 11 cabins on the officer's top deck. The crew has its own recreation and dining rooms.

The Chi-Cheemaun is controlled from the "bridge" or control room on the top deck of the ship where one of two captains is always in charge. The modern navigational equipment includes standard and gyro compasses, two FM radios and two radar units. As you walk around the decks you will notice some of the emergency equipment on board. There are enough lifejackets and liferaft space for everyone on board, plus ringbuoys and flares.

Are you worried about getting seasick? Chances are you won't because the Chi-Cheemaun is equipped with a pair of 3 m. (9 ft.) fish-like fins or stabilizers that are used on rough days to prevent the ship from "rocking." If you look over the rail about amidships you will see them if they are being used. They are tetracted on smooth sailings and when docking.

The stabilizing "fins" are not the only fish-like characteristics the Chi-Cheemaun possesses. You could imagine you were on the "set" of the movie <u>Jaws</u> when the huge bow visor opens to allow loading and unloading of vehicles at Jobermory!

If you would like to read more about the Chi-Cheemaun and earlier ferries or about local ship wrecks, you could purchase the booklets "The Chi-Cheemaun" or "The Tobermory Shipwrecks" written by Rick and Jack Salen and published by the Mariner Chart Shop in Jobermory. They are available on board and at both ports.

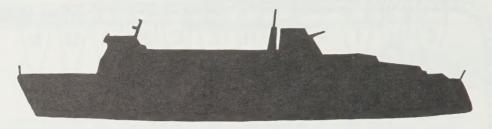
See how many words you can form from the letters in Chi-Cheemaun!

COCCO	CHI - CHEEMAUN	Surres
COCCOCCO		2000000
2000000		0000000
CONTROL		JOSE WAS OUT
STOCKE		
STATE OF THE PARTY		WEEKE
Constant		man
Samos de		perman

Score yourself as follows:

45-50 Super excellent
20-30 Above average
40-45 Excellent
10-20 Your parents are not helping enough!
30-40 Very good
0-10 You're not concentrating

The silhouettes below, courtesy of Rick and Jack Salen, show the comparative sizes of the ferries that have served Jobermory and South Baymouth.



Chi-Cheemaun 1974 - 140 cars



Norisle 1946-1974 50 cars



Norgoma 1963-1974 38 cars



Caribou 1936-1946



Normac 1932-1963

The Normac was originally purchased from the Detroit Fire Department where she was an ice breaker and fire fighter. Until 1981, she was moored in Isronto harbour as Captain John's Harbour Boat Restaurant. The very first ferry was the Kagawong, a small steamer that carried 8 cars a trip from 1930 to 1932.



Manitou's Sacred Island



Manitoulin has always been a very special place for the Ojibwe and Odawa (Ottawa) Indians, as they believed it was the home of their Great Spirit, Manitou, after whom the island is named.

The Ojibwe and Odawa shared the same territory and had many similar customs. Joday they are usually referred to as Ojibwe because that is the common language spoken. The Ojibwe were a very peaceful people who lived a nomadic life depending mainly on hunting and fishing. Their family and tribal affairs were highly organized and greatly impressed the early white man. Because of their efficiency and reliability, the fur trade in the area prospered.

In the 1880's as white settlers began moving farther north, the Indians' traditional hunting grounds were threatened by lumbering, road building and clearing for farms. Meetings were held between government officials and tribal chiefs to try and resolve these land problems. Ireaties were eventually signed whereby areas of land, called reserves, were deeded to the various Indian bands. Joday, most of the Manitoulin Island Ojibwe live on one of five reserves - Sheshegwaning, West Bay, Sheguiandah, Sucker hake or Wikwemikong, the only unceded reserve in North America.

The Ojibwe are becoming increasingly aware of their unique cultural and historical heritage. The Ojibwe Cultural Joundation at the West Bay Indian Reserve is helping Indians from many reserves re-learn nearly forgotten skills and arts. They are encouraging artists to illustrate their special natural and spiritual insights; they are helping to organize craft, song and dance workshops. They are writing down some of the old legends and medicine recipes that have only been passed on by word of mouth. Most important, they are helping to teach the Ojibwe language - both spoken and written in their schools.

Visitors are always welcome at the Ojibwe Cultural Foundation, where examples of Indian art, craft and literature are displayed and available for purchase. There are also several shops that feature Indian crafts on Manitoulin Island, along the highway to Espanola and in Jobermory where bead work, miniature birch bark canoes, jewelry, blankets, stone and quill work, baskets etc. are sold.



The Ojibwe had over 200 figures which they used in their picture writing.



Children are very special people in the Indian way of life, for through them, traditions are kept alive. Legends are like special gifts that are passed on from generation to generation, just the way a ring, for example, might be passed on from grandmother to mother to daughter. This legend about the owl from a story by Howard Corbiere, edited by Mary Lou Fox and illustrated by Martin Panamick, is reprinted here with the kind permission of the Ojibwe Cultural Foundation

KO-KO-KO THE OWL

THE OJIBWE PEOPLE CALL THE OWL
KO-KO-KO, BECAUSE THAT IS THE KIND
OF SOUND HE MAKES. THEY BELIEVED
THAT HE POSSESSED MAGICAL POWERS,
WHICH WERE NOT ALWAYS USED FOR
THE GOOD.

ONE DAY, A YOUNG BOY WAS WALKING THROUGH THE WOODS. AN OWL WAS SITTING IN A TREE. HE DID SOMETHING THAT SEEMED VERY STRANGE TO THE YOUNG BOY.

THE OWL WAS ABLE TO TURN HIS HEAD IN ANY DIRECTION. HE WAS EVEN ABLE TO TURN IT COMPLETELY AROUND. THIS WAS VERY STRANGE AND THE YOUNG BOY STOPPED AND OBSERVED THE OWL YERY CLOSELY.





AFTER WATCHING FOR SEYERAL MINUTES, HE
WONDERED IF HE COULD DO THE SAME. HE TRIED
MOVING HIS HEAD ONE WAY AND THEN THE OTHER.
HE COULD TURN HIS HEAD JUST ABOUT HALFWAY
AROUND BUT HE WAS UNABLE TO TURN IT
COMPLETELY AROUND.

THE BOY RAN BACK HOME TO HIS VILLAGE AND TOLD HIS FATHER ABOUT THE STRANGE ACTIONS OF THE OWL. HE ASKED HIS FATHER, - " HOW CAN THE OWL TURN HIS HEAD, RIGHT AROUND? IS IT MAGIC?"

THE FATHER SAT DOWN WITH HIS SON AND TOLO HIM THIS STORY.

NANNEBUSH WAS AN IMPORTANT SPIRIT AMONGST
THE OJIBWE PEOPLE. HE WAS OFTEN YERY
MISCHIEVOUS, AND LIKED TO PLAY TRICKS ON
THE PEOPLE AND THE ANIMALS. BUT NANNEBUSH
WAS ALSO YERY KIND AND VERY HELPFUL.

ONE DAY NANNEBUSH DECIDED TO GO FOR A WALK IN THE FOREST. HE OFTEN DID THIS. IT WAS ONE OF HIS FAVOURITE PASTIMES. IT WAS A NICE DAY BUT THE FOREST WAS THICK AND DARK.





WHILE NANNEBUSH WAS WALKING ALONG
THE TRAIL, SOMETHING STRUCK HIM FROM
BEHIND. IT KEPT STRIKING AT HIM, OVER
AND OVER AGAIN. IT WAS AN OWL
AND A VERY BRAVE ONE, FOR HE
CHALLENGED NANNEBUSH TO A FIGHT.

THE TWO STRUGGLED TOGETHER FOR SOME TIME. EACH ONE TRIED TO OUTWIT THE OTHER. THEN, NANNEBUSH SUPDENLY GRABBED THE OWL'S HEAD WITH A FIRM GRIP. WITH ALL HIS STRENGTH, HE TWISTED THE HEAD OF THE OWL ALL THE WAY AROUND.

EVER SINCE THEN, THE OWL HAS BEEN ABLE TO TURN HIS HEAD ALL THE WAY AROUND. HE CAN LOOK IN FRONT OF HIM AND SEE WHERE HE IS GOING. THEN HE CAN TURN HIS HEAD BACKWARDS AND SEE WHERE HE HAS BEEN.

OJIBWE CHILDREN ARE WARNED BY THEIR PARENTS
NEVER TO ACT LIKE AN OWL, BECAUSE THE
SAME THING MIGHT HAPPEN TO THEM. TO OJIBWE
PEOPLE, THE OWL IS A SIGN OF BAD LUCK
EVEN TO THIS DAY.





As the fur trade in the Georgian Bay area declined, commercial fishing increased; bringing many settlers to the area.

In 1880 the tiny, isolated village of Killarney employed 300 fishermen who shipped 10 tons of fish a week to Joronto alone and even more to Buffalo! What is now the the ferry parking lot in Jobermory was,

in 1885, Fisherman's Cove where the catch of laketrout, white fish and herring was salted and packed in 100 lb. barrels and shipped by Steamer to Meaford. Joday, on all of Manitoulin Island, only two dozen people are engaged in fishing for a living, and their catch is now shipped mainly to New York City. Just as commercial fishing replaced fur trading, sport fishing now attracts thousands of tourists to the region - helping make tourism the #1 industry!

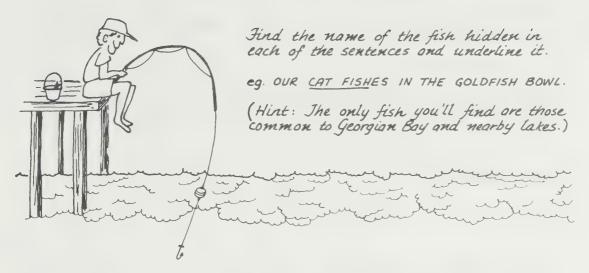
Because of the importance of fishing in the area, the Ontario government established a Fisheries Research Station just north of South Baymouth in 1947. Here fish biologists study such things as the life cycles of fish, problems caused by the lamprey eel, characteristics of fish nets, changes in the fish community and experimental plantings of various trout species in South Bay. A visit to the Station is very interesting.

Both the Ontario and Michigan governments have been experimenting with fish hatcheries to serve the Lake Huron fish industry for a long time. In 1880 Michigan hatcheries "planted" a million baby fish, called fry, along the shores of hakes Huron and Erie. By 1912 Ontario had established hatcheries in Wiarton, Southampton and Collingwood, and in 1933 built a hatchery at Little Current for whitefish, ciscoe and walleye. This hatchery has been moved to Sandfield where it now specializes in rainbow, speckled and lake trout and splake. Visitors can walk around the open ponds or picnic on the

Fish stocking by helicopter drop

beautiful grounds.

Fish Find



ALAN THOUGHT IT WAS A SUPER CHANCE TO MEET HER.

THE DRUNK MEN SHOUTED: "BRING MORE ALE, WIVES!"

IN SAN FRANCISCO EVERYTHING GROWS ALL YEAR.

NICKEL ORE IS SMELTED IN SUDBURY.

THE PSALM ON THE TAPESTRY IS VERY OLD.

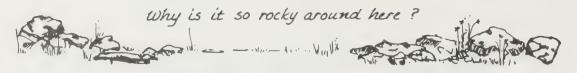
THERE WERE THREE BASSOONS IN THE ORCHESTRA.

THE APPLE PICKER ELBOWED HIS WAY TO THE FRONT.

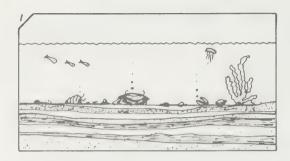
THE CARPENTER REBUILT OUR KITCHEN CABINETS.

THE SCHOOL WORKSHOP OWNED EIGHT ROUTERS.

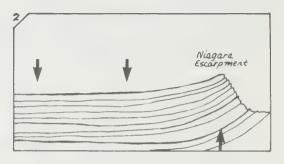
SHE LOST HER RING WHILE SCUBA DIVING.



Did you know that the rocky land that forms Manitoulin Island, the Bruce Peninsula and the islands around the tip of the Bruce, are all part of the same Niagara Escarpment that Niagara Falls tumbles over in Niagara or that you may "tumble over" while skiing at Collingwood? These illustrations explain how it all happened.



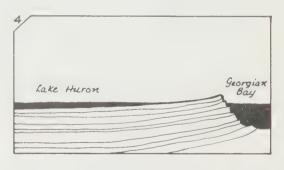
500 million years ago this whole area was under a tropical sea. As the marine creatures died their shells were deposited in layers of sediments on the sea bottom. Joday, you can find many of their fossil remains in the rocks of the area.



After the sea receded, various forces depressed the centre of these deposits, pushing up the edges in a saucer-like fashion, exposing the layers of rock. Part of this steep edge is now called the Niagara Escarpment.



Years later the area was scoured by glaciers. The action of the ice scraped off much of the topsoil and broke off many large pieces of rock. If you are observant you can see these glacial scratches and boulders in the area. The weight of the ice caused the entire region to sink a bit, and when the glaciers melted, most of the area between Jobermory and Manitoulin was underwater. These submerged rocks and remaining islands have teen the graveyard of many ships.



If you visit both the Lake Huron and Georgian Bay shorelines, you will be able to see major differences. The Lake Huron shore has shelving beaches where you can wade out a long distance in shallow water. On the Georgian Bay side the cliffs drop abruptly into deep water. For this reason, swimming in Georgian Bay is much colder than in Lake Huron.

Rocky Riddles!



The "flowerpots" in Georgian Bay Islands
National Park are columns of layered
rock that have been separated from the
adjacent cliffs of Flower Pot Island by
wind and water erosion. You can visit
the Park by taking a tour boat from
Jobermory.



Other interesting geological features of the Escarpment are caves. They are created by water dissolving the limestone rock. Good examples are found on Flower Pot Island and in Cyprus Lake Provincial Park. Some caves are below water and can only be explored by divers.



This monument in Jobermory marks the northern terminus of the Bruce Irail. The trail follows the Niagara Escarpment from Niagara Falls to Jobermory. The rocks in the monument are typical of those in the area where holes, or pits, have been formed due to dissolved timestone. They look like Swiss cheese!

See if you can unscramble the geological terms below. (Hint: they can all be found on this and the previous page!)

KOCR	RICEGLA
SUPELANIN	SOFILS
DISNAL	CHEAB
VEAC	OSIONER
TIMELEONS	LIPOSOT



VOYAGEUR TO

IMAGINE YOURSELF A YOYAGEUR IN 1800 ~ PADDLING DOWN THE FRENCH RIVER INTO GEORGIAN BAY ON A FUR TRADING EXPEDITION. QUITE BY ACCIDENT, YOU DISCOVER THAT A TEA BREWED FROM A RARE BRUCE PENINSULA LICHEN AND WATER FROM MANITOU LAKE GIVES YOU AN INCREDIBLE LIFE SPAN OF OVER 300 YEARS! "VOYAGEUR TO SCUBA DIVER" RELATES SOME OF THE CHALLENGES AND ADVENTURES YOU WILL FACE TO REACH THE PRESENT DAY.

1979	1976	1972	1970	1965
YOU TAKE EXPERIENCED DIVERS ON TOURS OF THE ARABIA WRECK		YOU ARE PART OF THE TEAM THAT DISCOVERS THE LONG SOUGHT WRECK OF THE SCHOONER "ARABIA", SUNK IN 1884.	YOU RETIRE AND MOVE TO TOBERMORY WHERE YOU CAN PURSUE YOUR SCUBA DIVING HOSSY.	
finish!		ADVANCE TO 1976	MISS ONE TURN	
1930	1933	1934	1935	1936
WHILE LOADING CATTLE ABOARD AT GORE BAY, YOUR LEFT FOOT IS TRAMPLED AND BADLY BROKEN	YOU FIRST CHILD, A DAUGHTER, 15 BORN IN LITTLE CURRENT. FAMILY CELEBRATIONS!		G	YOUR SECOND CHILD, A SON, DIES AT BIRTH.
RETURN TO 1920	ADVANCE TO 1950			MISS ONE TURN
1929	1927	1922	1920	1917
JOBS ARE SCARCE DURING THE DEPRESSION YOU FINALLY GET WORK AS A DECK HAND ABOARD THE SS MICHIPOCOTEN		YOUR HOUSE GOES UP IN FLAMES DURING A JANUARY BLIZZARD MOVE IN WITH FRIENDS.		WEDDING DAY! YOU MARRY THE GIRL FROM LITTLE CURRENT.
ADVANCE TO 1934		RETURN TO 1914	Se S	ADVANCE TO 1935
/847	/850	/853	1858	1860
	FELL OVERBOARD DURING A STORM WHILE HAULING IN FISHING NETS PNEUMONIA RESULTED		SAVED SOME MONEY BY WORKING AS A LUMBERJACK ON FITZWILLIAM ISLAND	
7	RETURN TO 1840		ADVANCE TO 1887	
1843	/840	/836	/833	/832
EMPLOYED BY THE GOVERNMENT TO TEACH CARPENTRY TO INDIANS AT MANITOWANING.		ATTEND THE TREATY SIGNING AT MANITO - WANING WHEN ALL OF MANITOULIN ISLAND IS SET ASIDE AS AN	BLACK FLY AND MOS- QUITO BITES CAUSE INFECTION AND HIGH FEVER	
ADVANCE TO 1860		INDIAN RESERVE ADVANCE TO 1847	RETURN TO 1929	
1800	1805	1808	1809	/8/2
START HERE	AN ODAWA INDIAN OFFERS YOU FILL HIS FURS FOR ONE OF YOUR MUSKETS.	AN UNEXPECTED RAPIOS AT WHITEFISH FALLS! CANOE OVERTURNS, DUMPING ALL YOUR SUPPLIES		
	ADVANCE TO 1812	RETURN TO 1800		

SCUBA DIVER



TO PLAY: CUT OUT THE PAPER DICE AND PLAYERS. SHAKE OR MIX
THE DICE THOROUGHLY BETWEEN TURNS ~ EACH PLAYER DRAWING
ONE DICE PER TURN. THE FIRST PLAYER TO REACH 1979 AND
"DIVE THE ARABIA" IS THE WINNER. TO WIN YOU MUST LAND ON
THE LAST SQUARE. FOR EXAMPLE, IF YOU ARE ON 1970 AND DRAW
A 5, YOU MUST WAIT FOR YOUR NEXT TURN AND DRAW AGAIN. EITHER
A 3 OR TWO MOVES OF I AND 2 WOULD MAKE YOU A WINNER.

1961	1958	1954	1950	1946
	SPENT YOUR HOLIDAY EXPLORING UNDER-			YOU ARE HIRED AS AN OFFICER ABOARD THE
	WATER WRECKS AND	16		SS. NORISLE, PROVIDING
(5)	CAVES NEAR	(2)		FERRY SERVICE BETWEEN
	TOBERMORY.			TOBERMORY AND
	00/01/00 00 10/0			SOUTH BAYMOUTH
	ADVANCE TO 1965			ADVANCE TO 1961
1938	1939	1942	/943	1945
^	WORLD WAR II BREAKS	YOU ARE SENT TO		THE WAR ENDS!
17	OUT YOU JOIN THE	ENGLAND TO TRAIN IN		A JUBILANT CELE-
	ROYAL CANADIAN NAVY	UNDERWATER TACTICS.	[[]	BRATION ON YOUR
	AND LEAVE FOR NOVA	BECOME FASCINATED BY MARINE DIVING	1521	HOMECOMING
	MISS ONE TURN	ADVANCE TO 1950		ADVANCE TO 1954
1916	1915	1914-	1913	1900
	\sim	1 1	WORK FOR ALGOMA	TAP 225 MAPLE TREES
(0)			EASTERN RAILWAY,	IN THE SPRING AND
	[[]	77	LAYING TIES BETWEEN ESPANOLA AND	SELL THE SYRUP TO A
	152		LITTLE CURRENT.	STORE MET THE OWNER'S
	· ·			DAUGHTER
			ADVANCE TO 1916	ADVANCE TO 1920
/862	1871	/883	/887	1890
ANITOULIN TREATY		SOLD 700 LBS OF SALTED		SEVERE WINTER COLD
LOWS WHITE SETTLERS		FISH TO BOOTH FISHERIES		KILLS NEARLY HALF
PURCHASE LAND ON		CO IN TOBERMORY	1 19.	YOUR TURKEY FLOCK
ANITOULIN DECIDE TO	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	PURCHASED 40 TURKEYS		
AGAWONG LAKE	V V	WITH THE MORES		
ADVANCE TO 1914		MISS ONE TURN		RETURN TO 1860
/830	1829	1828	1827	1824
PEND SEVERAL YEARS		MET VOYAGEUR ACQUAIN-	DECIDE TO SPEND	
THE FELLOW VOYAGEURS		TENANCES AT MEETING	THE WINTER WITH	
ROM DRUMMOND ISLAND	191	ON DRUMMONO ISLAND,	FATHER PROULY AT	
T SAINTE-MARIE-		WHEN IT WAS CEDED TO	MACINAC	
MONG - THE - HURONS		THE USA		
ADVANCE TO 1940		ADVANCE TO 1829	MISS ONE TURN	
1815	1817	1818	1820	1821
OU ARE GIVEN A		LOST YOUR FOOTING		NORTH WEST CO AND
EAUTIFUL PAIR OF		WHILE PICKING BLUE -	me and	HUDSON BAY CO JOIN
NOW SHOES BY AN	12	BERRIES ON LA CLOCHE		AS THE HUDSON BAY CO
NDIAN FRIEND		MTS TAKEN TO THE	- cal-11, a . c . 11,	PARTY AT THE FRENCH RIVER POST!
		NORTH WEST CO TRADING	in the training	KIVER POST
ADVANCE TO 1824		RETURN TO 1817		MISS ONE TURN



MANITOULIN ISLAND WORD SEARCH

Circle the Indian place names in this puzzle.

Remember to search in all directions including diagonally.

C	A	J	1	K	P	U	5	Н	K	W	U	D	/	N	0	N	G
G	7	U	۷	X	1	P	R	C	C	E	R	0	5	P	R	Ν	~
У	Ν	Н	Ε	W	0	M	1	D	U	Μ	J	W	Ν	P	0	7	1
8	A	1	z	Ε	V	7	Q	A	1	Z	A	8	C	K	P	0	У
R	E	G	N	1	Ν	A	W	0	0	/	N	И	Μ	A	L	7	U
×	B	F	G	A	Н	R	5	У	0	۷	7	Ε	Y	G	E	C	W
4	G	G	Ν	0	W	1	J	/	B	E	W	M	F	/	С	N	/
D	0	N	1	T	5	G	5	E	L	K	V	Q	P	G	F	R	Н
1	K	E	0	K	Z	\sim	E	5	Ε	IJ	W	A	8	E	5	/	z
У	0	E	R	W	1	۷	P	E	5	Μ	A	B	U	W	V	C	A
B	7	G	J	U	0	X	W	F	Н	F	1	0	IJ	0	Ν	7	1
K	M	/	0	Q	V	D	M	W	B	5	/	R	C	N	0	H	H
E	V	H	5	M	B	T	/	L	P	B	E	R	0	G	/	G	С
G	U	<i>C</i>	M	G	D	B	T	G	W	/	۷	Ε	F	Н	V	P	T
У	U	M	A	C	۷	K	Ν	Q	A	5	7	V	Н	8	7	X	C
F	0	R	C	K	M	A	C	0	R	Z	8	Y	W	5	A	W	7

Ojibwe		English
WEBIJIWONG	"Where the water starts to run" from the Odowa word "webi" meaning to start or begin, and the Ojibwe word "jiwan" meaning running water.	LITTLE CURRENT
MUNIDOWANING	"Home of the Manitou" or "Den of the Great Spirit".	MANITOWANING
WEEKWEMKONG	"Bay of the Bequer."	WIKWEMIKONG
ZAGIDOWONG	"The outlet" of South Bay.	SOUTH BAYMOUTH
M'CHIGEENG	Meaning either "Place of the fish harpoon" or "Place where there is something massive" which might refer to the steep Escarpment bluffs.	WEST BAY
TCHIAZHIWUYING	"Where sand curves around the water" describing the sand dunes and beaches.	PROVIDENCE BAY
KAGIGEWONG	"The place where it is always foggy" because of the mist from the water falls.	KAGAWONG
PUSHKWUDINONG	"The barren hill"-perhaps due to a fire.	GORE BAY
MUDIMOWEHN	"The old woman." Legends say the Algonquin hero Nanaboozhoo became angry with one of his wives and hurled her body into the lake where she became an island.	MINDEMOYA
SHEESHEEGWANING	"Where there are rattlesnakes" a highly unlikely occurrence today!	SHESHEGWANING



Birchbark Canoes

thave you ever seen a real birchbark canoe? If so, it may have been in a museum as there are very few Indian craftsmen still making them.

Jurn the clock back 100 years and let's observe an Indian family making themselves a small canoe for gathering wild rice.

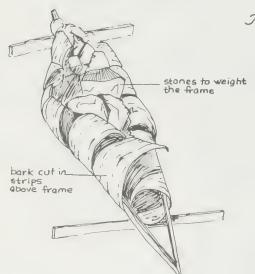
Finding a suitable white birch tree
can take as long as building the canoe!
The tree should be about 50 cm. (20 in.)
in diameter at the base and have at
least 4.3 m. (14 ft.) free of branches
and serious Knotholes. The bark is
usually harvested in late spring
as that is when it peels the best.
It should be between 3 and 5 m.m.
(1/8 to 1/4 in.) thick and be very strong.

The family will need jack pine roots for stitching the bark and lashing it to the gunwales. They will also need about 1.4 k.g. (3/bs.) of spruce or pine gum, which they mix with fat, to caulk the canoe to prevent it from leaking. The children help gather the gum while the women boil and split the roots to make them more pliable. hastly, they must have a good supply of white cedar to cut and shape into the ribs, sheathing and gunwales. They use a special crooked knife to cut the bark and shape the wood.

Now they are ready to begin construction! First, the building site must be cleared and levelled before the birch bark is rolled out.

Unlike a canvas canoe where the fabric is stretched around a previously constructed frame, in a birchbark canoe the frame is built to fit inside the particular piece of birch bark.





The frame, consisting of the thwarts and gunwales, is centered on the unrolled bark.

Jemporary sheathing is placed over the bark, then large stones are used to weight the cance and help form its shape.

Next, 8 or 9 slashes are made in the bark along both sides above the frame. When the bark is folded up and shaped around the frame, these pieces will overlap.

bark cut and lashed

supporting

.bark strips overlapped

Stakes are driven into the ground on both sides of the canoe to hold the bark while the women lash the gunwales into position and sew the bark seams.

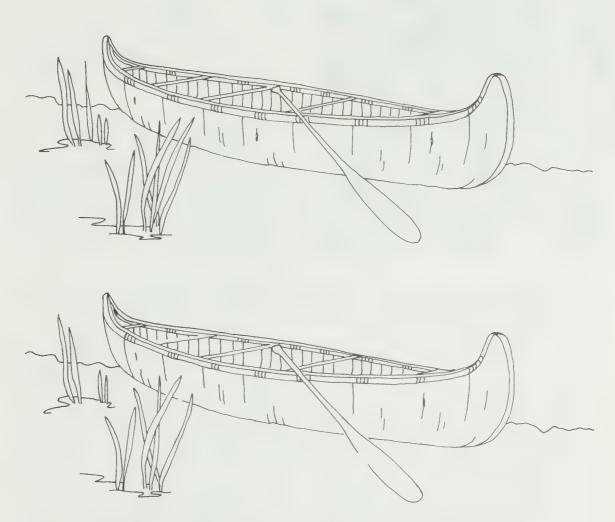
Meanwhile, the men are cutting and shaping the ribs - usually 28 for a 3.6 m (12 ft.) cance. They are soaked in water so they can be bent into

Shape, then left to dry in the sun. They finish lashing the tips of the cance and caulk the inside seams of the bark. Next, they cut about



50 strips of cedar for the flooring and fit them into the canoe. When the ribs are dry they are carefully inserted over the flooring. Everyone helps at this stage as it is very important not to put too much stress on the canoe or the bark may split, however, there must be enough pressure to hold the bark tight and the ribs taut.

The final lashings are made, the outside Seams and ends are Caulked - and the Canoe is finished! Iwo Indians beached their almost identical birchbark canoes while they went hunting. Can you find the 10 minor differences in the two pictures?



When they returned they were very hungry. Since they had gathered some blueberries they decided to build a small fire and cook some blueberry bannock before returning home.

Bannock is easy to make and delicious as a campfire snack. It can be cooked like pancakes in a pan, or better still, as described below.

BANNOCK Mix together: 3 cups flour

1/2 tsp. salt

1 tsp. baking powder

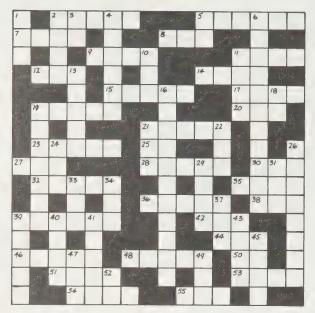
2 tosp shortening or margarine

3/4 cup water

optional - raisins or other fruit

Knead the dough, then divide it into 6-8 portions. Shape the bannock around the end of a cooking stick. (The dough should be about the size and shape of a hot dog.) Bake over not coals until golden brown, turning often. Remove the stick and fill with your favourite jam.

Georgian Bay Crossword Puzzle



- You may have to ____ questions to do this puzzle.
- The Indians would set up ___ where the hunting was good.
- Short for morning.
- 4. The predominant Indian tribe around Georgian Bay.
- I put __ my jeans.
- 6. The Bruce Peninsula separates. - from Lake Huron.
- 10. Short form for night before.
- 11. Georgian Bay is a very ____ body of water. 32.
 13. Eddy Forest Products has a large ____ 35. mill in Espanola.
- 16. An Ojibwe word megning "big canoe".
- 18. Short for "grand touring" sports cars.
- 19. The Indian God after whom Manitoulin Island is named.
- 21. Many people tour northern Ontario in one of these.
- 12. Keeps your head warm.
- 24. Ontario Northland Railway.
- 26. Lands owned by Indian bands.
- 29. Northern Ontario was explored in search of these.
- 31. These animals give birth to baby lambs.
- 33. A deciduous tree bearing acorns.
- __birch bark 34. Indians now make _ canoes for children.
- 37. A sweet potato.
- 39. A method of fishing.
- 40. The ____end of a ship is its stern.
- 41. You may need to _ _ your mistakes. 43. Boats head for one of these in a storm.
- 45. ____ did you say?
 47. The ___ of 1812 caused kardships.

- 49. How old you are.
- 52. Opposite of ske.

Across

- 2. These early vessels were made of bark.
- 5. One of the gases in divers tanks.
- 7. Layers of ore.
- 8. Bears hibernate in these.
- Fathom ____ Provincial Park is a unique underwater park.
- The ferry will tie up at the
- 12. Ontario Provincial Police.
- 14. Manitoulin is well known for its abundance of these wild animals.
- 15. Many divers come to Jobermory to explore these.
- 17. Birds lay them.
- 19. The tree from which a delicious syrup is made.
- 20. Silica is mined by the open_ method in Killarney.
- 21. A common deciduous tree with characteristic white bark.
- 23. The direction the Chi-Cheemaun travels from Jobermory to South Baymouth.
- 25. Abbreviation for Upper Canada.
- 27. Fish swim with these.
- 28. Ferry staff work on the _ _ system.
- 30. Many Manitoulin farmers keep these to make honey.
- A favourite fish to catch in Ontario.
- 35. A movie the bow of the Chi-Cheemaun may remind you of.
- 36. The Chi-Cheemoun provides. service between the Bruce Peninsula and Manitoulin Island.
- 38. A sound you might make when frightened.
- 39. Manitoulin used to be famous for these birds, especially at Thanksgiving
- _ is collected in early spring in the sugar bush.
- 4. You need to ____ your lawn nearly every week in summer.
- 46. A more common spelling for Ottowa
- 48. Deep water diving.
- A factor used to classify blood types.
- 51. A symptom of measles.
- 53. Biologists put these on some fish so they can study their habits.
- 54. All fishing rods have one.
- 55. Divers wear ____ suits to keep warm, not dry.

Abandon ship! Abandon ship!



Georgian Bay has been an important skipping area since the Voyageurs and Courreurs de bois navigated its shores in birch bark canoes.

The first sailing ship used on the Great Lakes was probably La Salle's Griffon, lost in 1619. Sailing ships dominated the waters during the 1800's when lumber, fish and grain were being transported in record quantities. Later, transportation between shoreline Communities was served by steam boats while larger, bulk carriers were built to serve the main Great Lakes shipping lanes.

Because of the treacherous rocks and reefs and the severe storms in the area, 140 ships went aground or sank around the tip of the Bruce Peninsula between 1828 and 1938.

In the early 1900's the Owen Sound Iransportation Company ran a package, freight and passenger ship service from Owen Sound to Sault Ste. Marie via the North Channel. The round trip would take about 5 days and the ships would stop at any community to load or unload supplies, people or produce. Because they often transported turkeys from Manitoulin Island, the Service was nicknamed the "Jurkey Irail"! In 1930 the Company began a regular summer ferry service between South Baymouth and Jobermory - carrying up to 8 cars a trip.

As you cruise Georgian Bay today aboard the Chi-Cheemaun you will see that shipping has changed greatly over the past several 100 years. Since the opening of the St. Lawrence Seaway in 1959, ocean going ships from all over the world have access to the Great Lakes and the waters of Georgian Bay. (You can identify a ship's country of origin by its stern flag.) You may also see a Great Lakes freighter, commonly called a "laker."

Most of the toats you see, however, will be pleasure craft - either motor or sail powered - as Georgian Bay is world renowned as a recreational boating area.

In Jobermory you will also see specially equipped dive boats (many former)

fishing boats) used to transport scuba divers to the wrecks of earlier shipping eras.

Locate the Jobermory Shipwrecks!



Suppose you are standing on a rock at the very centre of Hower Pot Island. Using your compass (the degrees are drawn on the map for you), the map scale and the information below, see if you an locate the 15 wrecks in Fathorn Five Provincial Park. Mark the spot with a symbol and print the ship's name beside it.



Cove Island Lighthouse

- W.L. WETMORE (steamer) Built in Cleuland, Ohio un 1871_ wrecked 1901 _ 7.3 Km at 237.°
- SWEEPSTAKES (SCHOOMEr) Built in Burlington, Ont. in 1867 - sunk 1896, and ð
 - Grand Hoven, Mich in 1879 wrecked 1907. 3. CITY OF GRAND RAPIDS (Steamer) Built in Both wrecks at 6.3 km at 220.
- 4. ARABIA (Schooner) Built in Kingston, Out. -

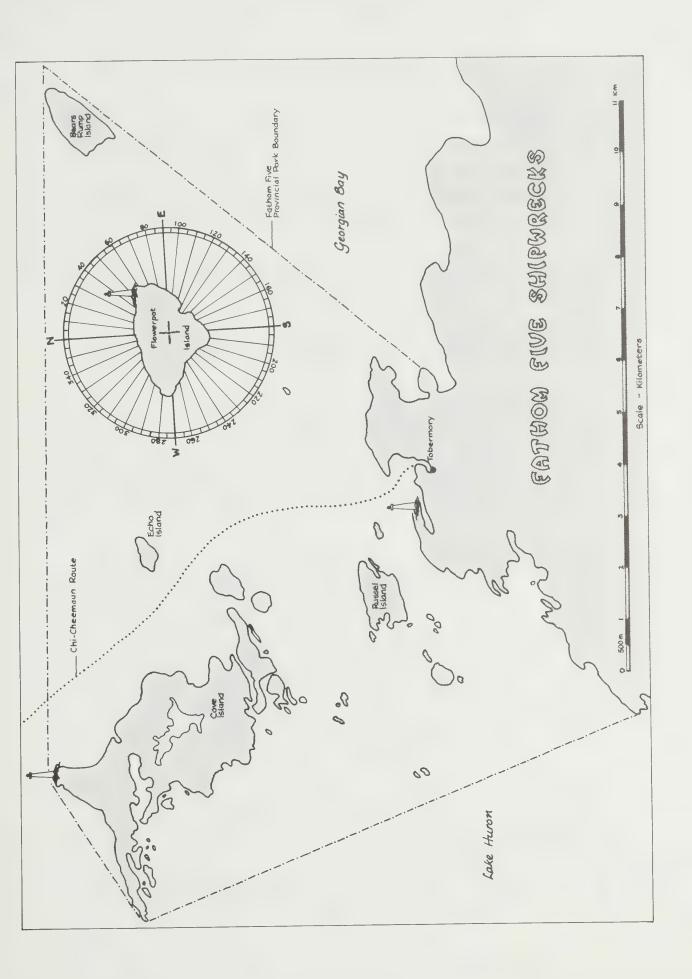
foundered 1884 - 3.8 Km at 286.

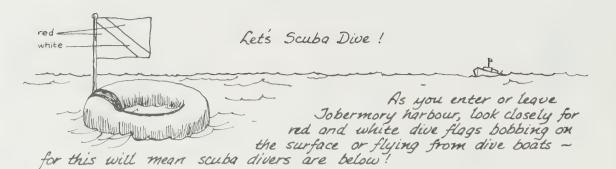
- NEWAYGO (Steamer) Built in Marine City, Mich. UN 1890 - Wrecked 1903 - 10 KM at 252.
- 6. CHINA (SCHOONER) Built in St. Catherines, Out. in 1863_ wrecked 1883 _ 7.5 km at 222.
- Ohio in 1863 _ wrecked 1889_ 5.8 km at 235. 7 PHILO SCOVILLE (SCHOONER) BUILT IN CLEVELAND,
- Ohio in 1870 wrecked 1904 5.2 km at 70. FOREST CITY (steamer) Built in Cleveland, œ

- JAMES C. KING (SCHOOMER) BUILT in Saginaw, Mich. in 1867 - wrecked 1901- 7.0 km at 240. 6.
- CASCADEN (SCHOONER) Built in South Hampton, Ont. _ wrecked in 1871 _ 10.8 km at 224. 10
- (sank in 1935) both steam fishing tugs-ALICE G. (Sank in 1927) and the ROBERT K.
- MARY L. BRECK (Schooner) Built in Kingston, Ont. in 1863 - wrecked 1900 - 3.7 km at 80. 13.
- Vermillion, Ohio in 1867 wrecked 1898. CHARLES P. MINCH (SCHOONEr) Built in 4
- 15. JOHN WALTERS (Schooner) Built in Pictor, Ont. 7.1 Km ot 230° U. 1874 - Wrecked 1889 -



Schooners used to tie their lines to this big iron ring set in the rock near the Big Tub Light.





The mony shipwrecks combined with the clear Georgian Bay water has made Jobermory one of the most popular scuba diving centers in North America. Hundreds of divers visit the area every week during the summer so you are sure to see them on dive boats, around the harbour or exploring rocks and wrecks along the shore. You can almost imagine the area has been invaded by strange, black, frog-like space creatures from some far-away watery planet!

Have you ever thought you would like to try scuba diving? To be eligible to take the basic scuba diving course you must be 15 years old, (some clubs allow 12-14 year olds if accompanied by a parent) and pass a senior level swim test. The 10 week course includes 16 hours of diving theory, 15 hours of pool instruction and 4 hours of open water diving. After you have passed the test, you become a certified diver. Once you have gained diving experience, you can enroll in more advanced or specialized courses.

Diving is a bit like mountain climbing or parachute jumping in that your life depends on your equipment and your ability to use it like all sports, however, accidents do happen. In diving there are two main types of emergencies. The most critical is when the lung ruptures due to overexpansion, producing a stroke-like condition less critical but more common is decompression sickness, sometimes known as the "bends." This happens when a diver comes to the surface too quickly, causing air bubbles to form in the blood. The same thing happens when you release the pressure from a tottle of pop by removing the cap. Both these diving emergencies can be treated by placing the injured diver in a recompression (hyperbaric) chamber which increases the air pressure, causing the air bubbles to dissolve in the blood.

Because Jobermory has become such an important diving centre, the Ontario government installed a hyperbaric chamber in the town medical clinic several years ago. It has already saved lives and reduced diving emergencies. Many divers now take courses that include a training session in the chamber to experience recompression.

SELF

CONTAINED

UNDERWATER

BREATHING

A PPARATUS

Gearing Up For Diving Down!



Pretend you have met a couple in Jobermory who gre planning a dive. While he goes to get their air tanks refilled, you help her get ready for the dive.

First, a wet suit is put on to keep warm in the cold Georgian Bay water. It is made of neoprene rubber and lined with nylon to make it easier to get on and off. Nitrogen bubbles in the rubber provide the insulation.

An inflatable life vest is worn over the wet suit. This is normally used only in an emergency to keep the diver afloat or if he is very tired and must swim a long distance.

The air tank has been refilled and is strapped on like a back pack. The air in the tank (where it is under 3000 pounds per square inch pressure) is reduced by regulators to equal the surrounding water pressure.

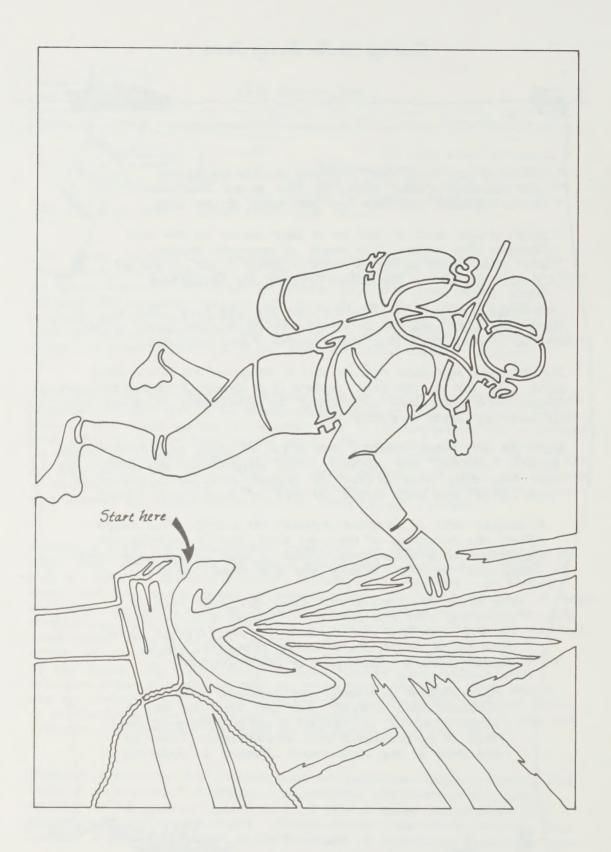
Next on are mask, snorkel and fins. In order to conserve air, divers "snorkel" the surface until they locate the wreck or cave they they wish to dive. An average tank lasts I hour at 9 m. (30 ft.) and only about 20 min. at 30 m. (100 ft.) deep.

A weight belt is fastened around the waist. This helps offset the buoyancy of the wet suit but is quickly unfastened in an emergency. After a final equipment check they put on their gloves and are ready to dive!

The bosic equipment our diver has just put on probably cost her between \$800.00 and \$1,000.00 in 1919- and did not include any accessories such as a depth or pressure guage, compass, knife, watch, camera, flashlight or thermometer.

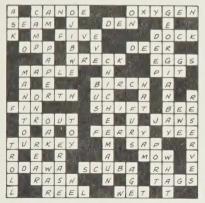
Even though you may not actually dive the Fathom Five wrecks, you can still see the diver's world by taking a glass-bottomed boat trip or by viewing the underwater films of the area at the Crowsnest Theatre in Jobermory.





This cutaway drawing of a scuba diver has only one line. Where does it end?

ANSWERS





(C/H/1) - (C)	HEEMAUN
$\wedge \wedge \wedge \wedge \wedge \wedge$	\vee \vee \vee \vee \vee \vee \vee \vee
chain	human
much	niche
ache	mon
hum	nim
can	Chic
- amen	mine
emu	епета
each	hen
olm	mince
acne	main
nice	ice
menace	cinemo
cane	cue
inch	hence
in	_ chime
men	_ hue
came	mechanic
ham	_ hunch
chin .	- china
chance	_ monic
cumin	chum
hem	_ numane
munch	mace
name	_ mochine
ace	_ mean

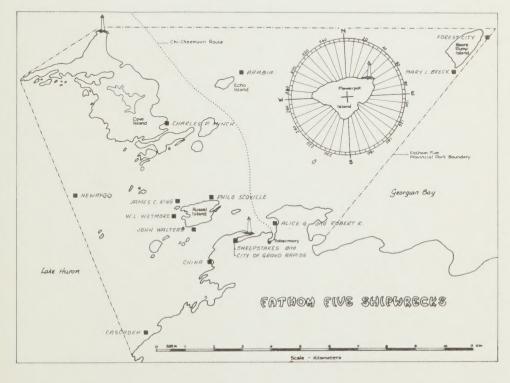
WORD SCRAMBLE

ROCK
PENINSULA
ISLAND
CAVE
LIMESTONE
GLACIER
FOSSILS
BEACH
EROSION
TOPSOIL

FISH FIND

- I. CARP
- 2. CISCOE
- 3. ALEWIVES
- 4. SMELT
- 5. SALMON
- 6. PERCH
- 7. HERRING
- 8. TROUT
 9. PICKEREL
- 10. BASS

Č	A	J	1	K	P	U	5	Н	K	W	U	D	1	N	0	N	G
G	Y	U	4	X	1	P	R	C	C	E	R	0	5	P	R	N,	M
13	W	H	E	W	0	M	1	D	U	M	J	W	N	P	0	4	1
8	A	1	Y	E	V	7	Q	A	/	Z	A	8	9	K	10	0	У
R	E	G	M	V	N	A	W	0	0	1	N	4	M	A	1	7	U
X	8	F	4	A	H	R	5	Y	0	4	T	E	4	G	E	C	W
14.	G	G	N	0	W	V	J	1	8	E	W	M	F	1	С	N	1
D	0	W	Y	T	5	6	5	E	4	K	V	Q	P	9	E	R	H
1	K	E	0	K	Z	M	E	5	E	14	W	A	5	E	5	1	Z
У	0	E	R	W	V	L	B	E	15	M	A	8	U	W	V	C	A
8	7	G	J	0	0	X.	(w)	A	H	F	1	0	U	0	N	7	1
K	м	1	0	Q	N	0	M	W	0	5	Y	R	C	N	0	H	H
E	V	H	5	M	8	7	1	¥	P	8	E	R	0	G	1	9	C
G	U	C	M	G	D	B	Y	G	W	1	7	E	F	H	V	P	7
У	U	M	A	C	4	K	N	9	A	5	T	y	H	8	7	Х	C
F	0	R	C	K	M	A	C	0	R	Z	8	Y	m	5	A	W	7



Colour the cover as follows:

- 1. white
- 2. red
- 3. block
- 4. dark blue
- 5. green
- 6. light blue

